

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/007988

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C01F7/36 C01F7/02 C01F7/44 B01J21/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NL 273 221 A (ENGELHARD INDUSTRIES, INC.) 10 September 1964 (1964-09-10)	1-3, 8-10, 13
Y	page 3, line 3 - page 5, line 24; claims page 9, line 11 - line 27; examples VII, VIII	1-13
A	POUSKOULELI G: "METALLORGANIC COMPOUNDS AS PRECERAMIC MATERIALS II. OXIDE CERAMICS" CERAMICS INTERNATIONAL, ELSEVIER APPLIED SCIENCE PUBL, BARKING, ESSEX, GB, vol. 15, no. 5, January 1989 (1989-01), pages 255-270, XP000103795 ISSN: 0272-8842 page 255	1
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

17 June 2005

Date of mailing of the international search report

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Schut, R

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SHARMA P K ET AL: "A critical role of pH in the colloidal synthesis and phase transformation of nano size alpha-Al ₂ O ₃ with high surface area" JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, ELSEVIER SCIENCE PUBLISHERS, BARKING, ESSEX, GB, vol. 23, no. 5, April 2003 (2003-04), pages 659-666, XP004400353 ISSN: 0955-2219 page 660, right-hand column, last paragraph	1
A	PH. COLOMBAN: "Structure of oxide gels and glasses by infrared and raman scattering. Part 1 Alumina" JOURNAL OF MATERIALS SCIENCE, vol. 24, 1989, pages 3002-3010, XP002328282 page 3009, right-hand column, paragraph 1	1,8, 11-13
Y	WO 96/34829 A (INSTITUT FUER NEUE MATERIALIEN GEMEINNUETZIGE GMBH; BURGARD, DETLEF; N) 7 November 1996 (1996-11-07) page 5, line 4 - page 13, line 27; claims	1-13
Y	WO 95/12547 A (RWE-DEA AKTIENGESSELLSCHAFT FUER MINERALOEL UND CHEM; NOWECK, KLAUS; SC) 11 May 1995 (1995-05-11) page 4; claims page 6, last paragraph	1-13
X	DE 198 36 821 A (RWE-DEA AG) 24 February 2000 (2000-02-24) claims	11,12
A	DATABASE WPI Section Ch, Week 198704 Derwent Publications Ltd., London, GB; Class E13, AN 1987-026149 XP002332226 & JP 61 283335 A (ASAHI KAGAKU KOGYO KK) 13 December 1986 (1986-12-13) abstract	1
A	DE 24 46 094 A (CONTINENTAL OIL CO.,) 10 July 1975 (1975-07-10) claims	1,8,13
A		1
A	WO 02/08124 A (INSTITUT FUER NEUE MATERIALIEN GEM. GMBH; DRUMM, ROBERT; GOEBBERT, CHR) 31 January 2002 (2002-01-31) page 4, line 4 - line 13 page 6, line 1 - line 3	1,8, 11-13

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International Application No
PCT/EP2004/007988

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
NL 273221	A		NONE	
WO 9634829	A	07-11-1996	DE 19515820 A1	31-10-1996
			DE 59608679 D1	14-03-2002
			WO 9634829 A1	07-11-1996
			EP 0823885 A1	18-02-1998
			JP 11504311 T	20-04-1999
			US 5935275 A	10-08-1999
WO 9512547	A	11-05-1995	DE 4337643 C1	03-08-1995
			AU 7690394 A	23-05-1995
			WO 9512547 A1	11-05-1995
			DE 59409056 D1	10-02-2000
			EP 0726877 A1	21-08-1996
			US 6030599 A	29-02-2000
DE 19836821	A	24-02-2000	DE 19836821 A1	24-02-2000
			WO 0009445 A2	24-02-2000
			EP 1025045 A2	09-08-2000
			JP 2002522343 T	23-07-2002
			US 6773690 B1	10-08-2004
			US 2005019249 A1	27-01-2005
			ZA 200001778 A	09-01-2001
JP 61283335	A	13-12-1986	JP 1885811 C	22-11-1994
			JP 6008171 B	02-02-1994
DE 2446094	A	10-07-1975	DE 2446094 A1	10-07-1975
			JP 50101290 A	11-08-1975
WO 0208124	A	31-01-2002	DE 10035679 A1	31-01-2002
			AU 8200301 A	05-02-2002
			WO 0208124 A2	31-01-2002
			EP 1301434 A2	16-04-2003
			JP 2004504256 T	12-02-2004
			US 2003098529 A1	29-05-2003